2008 Trending Narrative

Step 1: Clean Data

A document, referred to as a lot/land file, was created and printed for each neighborhood in each township. The lot/land file contains information about the age, grade and valuation of the dwelling, lot and/or land size and valuation, and property class for all key numbers in a neighborhood.

The lot/land file was used to identify neighborhoods with inconsistent land valuation. Most neighborhoods had a positive "Type 0" influence previously applied to land. These influences were removed in the rural townships and the land base rate recalculated based on a 20% ratio of average improved sales from 2006/2007 or vacant sales when available. The new base rate was applied to all parcels in the neighborhood.

Despite a market system, agricultural land receives a subsidized assessment. The trending factors for dwellings sold with agricultural land are typically higher to compensate for the undervalued land. To prevent these high factors from influencing residential parcels, each township has a rural residential neighborhood and an agricultural residual neighborhood..

Vacant residential build-able parcels are frequently undervalued as excess residential land – use type 91 at 10% of the home site base rate. Many of these were changed to a home site acre, use type 9, at the neighborhood base rate, then applied a percent negative influence for lack of well, septic, excavation and/or sewer tapping fees equal to approximately $14000.

Obsolescence applied to dwellings was reviewed this annual adjustment period. Many dwellings with obsolescence received updated land values, changes from field reviews and/or a new neighborhood. The obsolescence, in these instances, was removed in expectation that the new changes would value the parcel correctly without obsolescence. A comparison between new 2008 assessed values and settled/PTABOA decisions will be performed to confirm the effectiveness of the changes. This is required due to the County's software system limitations.

Consistency of dwellings, per neighborhood, was also considered in cleaning our data. Where it was a problem, dwellings with substantially different ages and grades were relocated to a more appropriate adjoining neighborhood. When a neighborhood had

dwellings of similar ages and grades, but depreciated replacement cost fluctuated drastically and the price related differential was noncompliant, stratification for value was applied.

Wea and Wabash townships have previously had their own township assessor's office; Fairfield still has a township assessor. Wea Township had the most homogeneous data in the county. Wabash had problem areas encompassing Purdue University due to the market dictations in that area. Many of these neighborhoods were a mixture of owner occupied single family dwellings, rented single family dwellings, single family dwelling converted to multi- units and large commercial apartment buildings. The 400-class apartments were moved to their own neighborhood and the field staff investigated many parcels to gauge accuracy of our assessment information. Purdue University housing will need to be an area of focus for general reassessment. Fairfield Township is the largest and most diverse township in Tippecanoe County. There are a few neighborhoods that were brought to our attention during this adjustment process that will need to be re-assessed and are a priority for 2009 pay 2010.

Step 2: Equalization

Each township has a work file with the valid sales organized by neighborhood. The factor necessary to directly equalize each valid, sold parcel was computed using statistical and International Association of Assessing Officials' standards. The median of these factors was applied to the entire neighborhood. There was no outlier removal policy although certain parcels were removed for various reasons (see removed valid sales pages). Previously mobile homes were assessed by the individual township assessors and there is little consistency across the county. To prevent these inconsistent factors from influencing neighborhood factors, they were not considered. If there were too few or no valid sales to use, the neighborhood factor was not altered. Jackson Township only had one valid, improved sale. Jackson Township received the same factor as Randolph's rural residual neighborhood because of their close market similarities.

Step 3: Ratio Report and testing

A ratio report for Tippecanoe County was conducted following IAAO standards. Statistics in the ratio study were calculated using SPSS version 16; this is why formulas are not present in the ratio study. Independent sample T-tests were performed on select neighborhoods and townships to determine if sale chasing has occurred. We understand that the DLFG will compare medians of populations of unsold Vs sold parcels via Mann-Whitney tests per neighborhood. We would like the conduct this test in the future and Mann-Whitney tests are easy to run with SPSS. We did not because we thought it would be better to submit the ratio study as soon a possible and not take extra time duplicating tests. Parcels that gained or lost more than 60 percent of their 2007 assessed value and parcels that were new in 2008 were not included in the T-test. These parcels were thought to be split, combined or substantially altered to some magnitude that would be confounding in determining if sale chasing has occurred. Determining if the sample of sales is representative of the data that it will impact is an important step. Unsatisfactory T-test or Mann-Whitney test performance undermines the trending process. Several state-certified appraisers and realtors were hired to handle appeals by determining value by adjusted comparable sales to offer tax payers an alternative value to bulk assessment via trended replacement cost. The appraisers in the appeals department have been instructed to adhere to their statutory obligation to ignore subject sale price in their determinations. We expect the results of future sale chasing tests to improve.

Part 4: Priorities for 2009 pay 2010

With statutory rate caps approaching, property class is more important than ever. Ensuring proper classes for residential, agricultural, commercial and industrial parcels will be a top goal. Confidence in property classes will make bulk changes to certain land classes per neighborhood through our resident assessment computer programmer feasible.

Inconsistent base rates for Land Use types 9 and 91 land among seemingly comparable lots was commonplace. For most non-residual residential neighborhoods, use types were reviewed for accuracy and corrected. Persisting land use type inconsistencies for vacant parcels in rural residential residual neighborhoods will need meticulous review to insure build-able lots are assessed as use type 9 land and un-build-able lots devoted to

residential use are valued as use type 91. These neighborhoods have many parcels devoted to residential use that may not be able to function as a home site, making bulk changes unfeasible. Vacant build-able lots will be influenced negatively depending on estimated cost of securing well and septic.

We were recently made aware that the DLGF requires eliminating the use of "V" type lots for a more equitable land assessment. Neighborhoods with a variety of lots, especially large platted subdivisions, were changed to F lots or converted to acreage assessment. In these neighborhoods, some V lots remain on developer discounted land. All "V" type, fixed value, lots will be replaced with more equitable "F" lots or converted to acreage if appropriate. Our software limitations make is impractical to value lots by area, they have to be converted to acreage and adjusted with the small acreage table. New software will enable us to value lots proportionally to their size without using front foot, which requires somewhat arbitrary adjustment when there are large discrepancies between actual and effective front foot measurements.

Areas in need of reassessment and re-delineation of neighborhood boundaries include: predominantly student occupied areas surrounding Purdue University in Wabash Township, the town of Romney in Randolph Township and the majority of downtown Lafayette in Fairfield Township. In these areas, attempts to stratify sales data by sale price (Market value), age, grade, etc has been ineffective. These areas require geographic stratification; geographic stratification requires more mapping, field checks and sales review than we had time to allocate for 2008.

Our Vendor, Tylor Technologies, has been working on re-listing the commercial and industrial property assessments. All of the new data has been gathered for the 10 rural townships but it has not been entered in the assess database. We are in the process of updating to a new CAMA package with Manatron.

Please find results of ratio study and hypothesis testing for sale chasing attached.